AMENDMENTS TO THE CLAIMS:

Please replace the claims with the following rewritten listing:

1. – 51. (Cancelled)

52. (Currently Amended) Apparatus for monitoring muscle activity relating to bruxism of a user, said apparatus comprising

~~- means for providing signals indicative of~~a signal provider configured to provide signal indicative of muscle activity,

~~- means for processing of~~a signal processor configured to process said signals in order to detect bruxism,

~~- means for providing a~~ a feedback provider configured to provide a feedback signal,

wherein the apparatus is ~~designed in order to be operated~~ configured for operation in a set-up mode and a use-mode, and

wherein said apparatus is ~~designed~~ configured to be individually adaptable in said set-up mode, wherein a normally occurring muscle activity and a maximal muscle activity are separately measurable~~ed~~ via electrodes that are communicable with the apparatus and mountable on selected muscles, and wherein the apparatus is configured to register~~ed~~ and ~~used to~~ calculate a threshold value for outputting of the feedback signal using said normally occurring muscle activity and said maximal muscle activity measured by said electrodes, said maximal muscle activity requiring a greater output of force than said normally occurring muscle activity, whereby a criteria based on said threshold value is established for releasing ~~a~~ the feedback signal to the user in such a manner that the criteria is adapted to the user.

53-55. (Cancelled)

56. (Currently Amended) Apparatus according to claim 52, wherein said apparatus ~~comprises means for~~is configured to register~~ing~~ and stor~~cing~~ said signals indicative of muscle activity during a time interval.

57. (Currently Amended) Apparatus according to claim 52, wherein said apparatus is ~~adaptable by having means~~configured for adjusting the intensity of said feedback signal.

58. (Currently Amended) Apparatus according to claim 52, wherein said ~~means for processing of said signals in order to detect bruxisms~~signal processor ~~comprises means~~is configured for pattern recognition.

59. (Currently Amended) Apparatus according to claim 52, wherein said ~~means for providing signals indicative of muscle activity~~signal provider comprises one or more electrodes for sensing of EMG-signals.

60. (Currently Amended) Apparatus according to claim 52, wherein said ~~means for providing signals indicative of muscle activity~~ signal provider comprises one or more electrodes for sensing of EEG-signals.

61. (Currently Amended) Apparatus according to claim 60, wherein said apparatus ~~comprises means for testing~~is configured to test said electrodes and in particular the connectivity to the user by supplying a test voltage or test current to one or more electrodes, measuring the resulting current or required voltage and comparing the result with reference value(s).

62. (Currently Amended) Apparatus according to claim 52, wherein said ~~means for providing signals indicative of muscle activity~~signal provider comprises a microphone, a sensor for sensing of vibrations and/or other sensor means.

63. (Currently Amended) Apparatus according to claim 52, wherein said apparatus ~~comprises means~~is configured for storing data corresponding to measured and/or processed signals.

64. (Previously Presented) Apparatus according to claim 63, wherein the apparatus further comprises a computer and means for transferring stored data thereto.

65. (Previously Presented) Apparatus according to claim 52, wherein said apparatus comprises a user module for wearing on the head.

66. (Previously Presented) Apparatus according to claim 52, wherein said apparatus comprises a slave module and a master module, said slave module being designed for wearing by a human being.

67. (Currently Amended) Apparatus according to claim 52, wherein said apparatus ~~comprises display means for displaying~~is configured to display instructions and/or results stemming from a monitoring session.

68. (Currently Amended) A method for monitoring muscle activity relating to bruxism of a user, said method comprising

providing signals indicative of muscle activity,

processing of said signals in order to detect bruxism,

providing a feedback signal in case of detection of bruxism, and

during a set-up mode:

separately measuring ~~and registering~~ a normally occurring muscle activity and a maximal muscle activity via electrodes that are communicable with a muscle activity monitor and mountable on selected muscles, ~~and~~

registering said muscle activity in said a muscle activity monitor measured by said electrodes; and

using said muscle activity monitor ~~registered muscle activities~~ to calculate a threshold value for outputting of the feedback signal based on said registered muscle activities, wherein said maximal muscle activity requires a greater output of force than said normally occurring muscle activity, whereby a criteria based on said threshold value is established for releasing ~~a~~ the feedback signal to the user in such a manner that the criteria is adapted to the user.

69. (Currently Amended) A method as claimed in claim 68, wherein the threshold value is calculated automatically~~, preferably~~ based on measurements of the muscle activity.

70. (Currently Amended) Apparatus according to claim 52, ~~further comprising means for calculating~~ wherein said apparatus is configured to calculate the threshold value automatically~~, preferably~~ based on measurements of the muscle activity.

71. (Previously Presented) Apparatus according to claim 52, wherein the calculated threshold value corresponds to between 3% and 20% of the maximal muscle activity.

72. (Previously Presented) Apparatus according to claim 52, wherein the threshold value is retrieved from a memory in which said threshold value has been stored earlier

73. (Previously Presented) Apparatus according to claim 52, wherein said normally occurring muscle activity is one or more grimaces performed by the user.

74. (Currently Amended) Apparatus according to claim 52, wherein said ~~essentially~~ maximal muscle activity is an essentially maximal jaw clenching performed by the user.

75. (Currently Amended) Apparatus according to claim 52, wherein said ~~means for processing of said signals in order to detect a particular undesired activity~~signal processor ~~comprises means for performing~~is configured to perform a FFT (Fast Fourier Transform) analysis of said signals.

76. (Currently Amended) Apparatus according to claim 52, ~~further comprising means~~wherein said apparatus is configured for frequency pattern recognition of said signals.

77. (Currently Amended) Apparatus according to claim 52, wherein said ~~means for processing of said signals~~signal processor ~~comprises means for determining~~is configured to determine the amplitude of the frequency content of said signals.

78. (Currently Amended) Apparatus according to claim 52, wherein said ~~means for processing of said signals~~signal processor ~~comprises means for~~is configured for low-pass filtering of said signals, thereby filtering out noise and unusable signals.

79. (Currently Amended) Apparatus according to claim 52, wherein said signal processor~~means for processing of said signals comprises means~~is configured for averaging and rectifying said signals.

80. (Currently Amended) Apparatus according to claim 52, wherein said apparatus is configured ~~further comprising means for~~ to accumulate~~ing~~ data ~~of,~~ and ~~means for~~ determine~~ing~~ and store~~ing~~ the frequency pattern of the muscle activity relating to bruxism.

81. (Currently Amended) Apparatus according to claim ~~52~~76, wherein ~~the means for~~said frequency pattern recognition ~~comprises means for~~includes comparing the frequency content of said signals to the stored frequency pattern of the muscle activity relating to bruxism.

82. (Currently Amended) Apparatus according to claim ~~52~~76, wherein ~~the means for~~said frequency pattern recognition ~~comprises means for~~includes comparing one or more harmonic frequencies of said signals to the stored frequency pattern of the muscle activity

relating to bruxism.

83. (Currently Amended) Apparatus according to claim ~~52~~82, wherein ~~the~~ a first harmonic frequency and/or the second and third harmonic frequencies of said one or more harmonic frequencies ~~signals~~ are compared to the stored frequency pattern of the muscle activity relating to bruxism.

84. (Cancelled)